



## UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
[www.uspto.gov](http://www.uspto.gov)

|                         |             |                      |                     |                  |
|-------------------------|-------------|----------------------|---------------------|------------------|
| APPLICATION NO.         | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
| 10/520,505              | 02/06/2006  | Francis P. Kuhajda   | 029869.00002-US01   | 5835             |
| 136                     | 7590        | 01/13/2009           | EXAMINER            |                  |
| JACOBSON HOLMAN PLLC    |             |                      | SHAMEEM, GOLAM M    |                  |
| 400 SEVENTH STREET N.W. |             |                      | ART UNIT            | PAPER NUMBER     |
| SUITE 600               |             |                      |                     | 1626             |
| WASHINGTON, DC 20004    |             |                      | MAIL DATE           | DELIVERY MODE    |
|                         |             |                      | 01/13/2009          | PAPER            |

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

|                              |  |                                       |
|------------------------------|--|---------------------------------------|
| <b>Office Action Summary</b> | <b>Application No.</b><br>10/520,505   | <b>Applicant(s)</b><br>KUHAJDA ET AL. |
|                              | <b>Examiner</b><br>Golam M. M. Shameem | <b>Art Unit</b><br>1626               |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED. (35 U.S.C. § 133).

Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

1) Responsive to communication(s) filed on 04 December 2008.

2a) This action is FINAL.      2b) This action is non-final.

3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

4) Claim(s) 1-8, 18, 26-30 and 39-66 is/are pending in the application.

4a) Of the above claim(s) 26-30, 39-55 and 58-66 is/are withdrawn from consideration.

5) Claim(s) \_\_\_\_\_ is/are allowed.

6) Claim(s) 1-8, 18, 56 and 57 is/are rejected.

7) Claim(s) \_\_\_\_\_ is/are objected to.

8) Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

9) The specification is objected to by the Examiner.

10) The drawing(s) filed on \_\_\_\_\_ is/are: a) accepted or b) objected to by the Examiner.  
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a) All    b) Some \* c) None of:  
 1. Certified copies of the priority documents have been received.  
 2. Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

1) Notice of References Cited (PTO-892)

2) Notice of Draftsperson's Patent Drawing Review (PTO-948)

3) Information Disclosure Statement(s) (PTO/SB/08)  
 Paper No(s)/Mail Date 02/12/2007; 02/06/06

4) Interview Summary (PTO-413)  
 Paper No(s)/Mail Date \_\_\_\_\_

5) Notice of Informal Patent Application

6) Other: \_\_\_\_\_

**DETAILED ACTION**

***Priority***

This application is a 371 of PCT/US03/21700 07/09/2003, is acknowledged.

***Status of Claims***

Claims 1-8, 18, 26-30 and 39-66 are currently pending in the application. Claims 47-66 have been added. Claims 9-17, 19-25 and 31-38 have been canceled.

Receipt is acknowledged of amendment / response filed on December 04, 2008 and that has been entered.

Claims 26-30, 39-55, and 58-66 are withdrawn from further consideration pursuant to 37 C.F.R. 1.142 (b) as being drawn to a non-elected subject matter.

***Information Disclosure Statement***

Receipt is acknowledged of Information Disclosure Statement (IDS), filed on 04/11/2006, which has been entered in the file.

***Response to Election/Restriction***

In response to the restriction requirements, Applicants have elected Group I, which includes claims 1-8, and 18 drawn to a compound of formula I, and the elected species as set forth and disclosed in compound 35 (Response, page 11), is acknowledged. Because Applicants did not distinctly and specifically point out the supposed errors in the restriction requirement, the election has been treated as an election **without traverse** (MPEP § 818.03(a)). However, in view of a fair interpretation of the claims, the Examiner will rejoin newly added claims 56 and 57 to the elected Group I invention (because they fall within the scope of elected invention). Therefore, the requirement for restriction is still deemed proper.

Applicants preserve their right to file a divisional on the non-elected subject matter.

As set forth in the restriction requirement and an election of a single compound (or set of compounds), the scope of the invention which has been examined, inclusive of the elected species is as follows:

A compound having the formula I wherein:

R<sup>1</sup> is as claimed,

R<sup>2</sup> is as claimed except OH,

R<sup>3</sup> and R<sup>4</sup> are as claimed and

R<sup>5</sup> is as claimed except H.

As a result of the election and the corresponding scope of the compound identified, claims 26-30, 39-55, and 58-66 and the remaining subject matter of claims 1-8, 18, 56 and 57 are withdrawn from further consideration pursuant to 37 CFR 1.142 (b) as being drawn to non-elected inventions. The withdrawn subject matter of claims 26-30, 39-55, and 58-66 is properly restricted as it differs materially in structure and in element from the elected subject matter supra so as to be patentably distinct there from.

#### *Claim Rejections - 35 USC § 103*

The following is a quotation of 35 U.S.C. § 103(a), which forms the basis for all obviousness rejections, set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-8, 18, 56 and 57 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Berry *et al* (2001). Applicant claims substituted thiophenone compounds, compositions and methods of use thereof.

*Determination of the scope and content of the prior art (MPEP §2141.01)*

Berry *et al* (2001) also teach the synthesis of several substituted thiophenone compounds similar to those of instantly claimed invention.

*Ascertainment of the difference between the prior art and the claims (MPEP §2141.02)*

The difference between the claimed compound and that of the reference herein lies in the selection of a single substitution in “R<sup>1</sup>” position, such as, R<sup>1</sup> is hydrogen for instantly claimed compound instead of a methyl (ME) group for the same position in the prior art, wherein all other variables are identical such as R<sup>2</sup> is OH, R<sup>3</sup> and R<sup>4</sup> are alkyl or arylalkyl [STN International, HCPLUS database, RN 348113-81-5, RN 348113-87-1, and a copy is provided with this Office action], which read on the instantly claimed compounds.

*Finding of prima facie obviousness--rational and motivation (MPEP §2142-2413)*

It would have been *prima facie* obvious to one having ordinary skill in the art at the time of the invention was made since Berry *et al* teach compounds which are generic to the instantly claimed compound. It is well established that the substitution of hydrogen for alkyl (ME) on a known compound is not a patentable modification absent unexpected or unobvious results. *In re Wood*, 199 U.S.P.Q. 137 (C.C.P.A. 1978) and *In re Lohr*, 137 U.S.P.Q. 548, 549 (C.C.P.A. 1963). Therefore, in the instant case, one skilled in the chemical art would be motivated to choose to replace an alkyl group with a hydrogen atom or *vice versa* in view of the known teaching of the art. Since the core compound of the formula I is not novel and the novelty (if

there is any) belongs to the selection of variable substitution, a great caution should be exercised to determine the patentability of the claimed invention. Therefore, in looking at the instant claimed compounds as a whole, the claimed compound would have been suggested to one skilled in the art unless unobvious or unexpected results can be shown.

***Objections***

Claims 1-8, 18, 56 and 57 are objected to for containing non-elected subject matter. The claims should be amended to exclude non-elected subject matter and within the scope of elected compound.

***Telephone Inquiry***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Golam Shameem, Ph.D. whose telephone number is (571) 272-0706. The examiner can normally be reached on Monday-Thursday from 6:30 AM - 5:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Joseph McKane, can be reached at (571) 272-0699. The Unofficial fax phone number for this Group is (703) 308-7921. The Official fax phone number for this Group is (571) 273-8300.

When filing a FAX in Technology Center 1600, please indicate in the Header (upper right) "Official" for papers that are to be entered into the file, and "Unofficial" for draft documents and other communications with the PTO that are not for entry into the file of the application. This will expedite processing of your papers.

Communications via Internet e-mail regarding this application, other than those under 35 U.S.C. 132 or which otherwise require a signature, may be used by the applicant and should be addressed to

[joseph.mckane@uspto.gov]. All Internet e-mail communications will be made of record in the application file. PTO employees will not communicate with applicant via Internet e-mail where sensitive data will be exchanged or where there exists a possibility that sensitive data could be identified unless there is of record an express waiver of the confidentiality requirements under 35 U.S.C. 122 by the applicant. See the Interim Internet Usage Policy published by the Patent and Trademark Office Official Gazette on February 25, 1997 at 1195 OG 89.

Any inquiry of a general nature or relating to the status of this application should be directed to the Group receptionist, whose telephone number is (571) 272-1600.

/Golam M. M. Shameem/  
Primary Examiner  
Art Unit 1626  
Technology Center 1600

Application/Control Number: 10/520,505

Art Unit: 1626

Page 7

Application/Control Number: 10/520,505  
Art Unit: 1626

Page 8